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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,047	01/29/2002	Guillaume Belrose	1509-256	3651

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EXAMINER

PENDLETON, BRIAN T

ART UNIT PAPER NUMBER

2644

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/058,047	Applicant(s) BELROSE ET AL.	
	Examiner Brian T. Pendleton	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 13 and 14 are objected to because of the following informalities: They are numbered twice. The second occurrence of claims 13 and 14 are treated as though they are claims 15 and 16 since the claim 17 follows the second occurrence of claim 14. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7, 13-16, 18-20, 21, 24, 25, 33-39 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Zwern, US Patent Application Publication 2001/0038378. Zwern discloses a game display virtual reality apparatus comprising computer 12, head mounted display 26, pointing device 16, headtracker 28 and viewport 22. The viewport 22 moves with the head movement of the user. There is provided spatialized audio which reads on “varying an offset between audio field reference relative to which sound ousrces are located in the audio field and a presentation reference”. The viewport 22 has a cursor which visually indicates the orientation of the audio field reference relative to a predetermined indicator reference,

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 20 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacknin et al, US Patent 5,854,843 in view of Foxlin, US Patent Application Publication 2002/0024675. Jacknin discloses a virtual navigator comprising a sensor system 318, data acquisition system 317, and audio synthesizer 340 for spatializing audio in a virtual audio field and rendering the audio to headphones 412. The virtual audio field is updated according to the orientation of the listener's head as determined by sensor system 318. Hence, Jacknin discloses varying an offset between an audio field reference relative to which sound sources are located in an audio field and a presentation reference determined by a mounting configuration of audio output devices through which the sound sources are synthesized. Jacknin also suggests that the virtual navigator system can be used in virtual reality applications. Jacknin does not disclose determining and visually indicating the orientation of the audio field reference relative to a predetermined indicator reference. However, that feature is well known in the field of virtual reality. Foxlin, which is directed to virtual reality, discloses in figure 4 a virtual reality visual scene of a cockpit which visually indicates the orientation of the visual field relative an indicator reference. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Jacknin to include the virtual reality scene, as taught by Foxlin for the purpose of increasing the realism of the virtual navigator. Claim 1 is met. Accordingly, method claim 20

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and apparatus claim 35 are also met. Regarding claim 4, Jacknin discloses an apparatus which is body stabilized.

Claims 6, 8-12, 22, 23, 26-32, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zwern in view of Anderson, US Patent 6,906,700. Zwern does not disclose a trackball for the mouse 16. However, as evidenced by Anderson, it was well known in the art of virtual reality to have a trackball for the purpose of rotating a user's view. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Zwern as taught by Anderson to increase the versatility of environment navigation. Regarding the limitations of a display or indicator arrangement incorporated in the trackball (input device), Examiner takes Official Notice that pointing devices with indication means for indicating how the device is being directed were well known at the time of invention and one of ordinary skill in the art would have known their benefits with regard to virtual reality and motivated to provide such means.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reitmaa et al, US Patent 6,424,843; Dickens, US Patent 6,766,028; Padula, US Patent 6,330,486.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian T. Pendleton
Primary Examiner
Art Unit 2644



btp